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1 given in the electronic message, and said information is
2 converted into hue, saturation, and brightness values.

3 5. The method of claim 1 wherein said locating step
4 comprises determining when at least one of the foreground color
5 and the background color is a gray-scale color.
6

7 6. The method of claim 5 wherein, when at least one of said
8 foreground color and background color is a gray-scale color, said
9 locating step comprises comparing saturation and brightness
10 values of the foreground color and the background color.

11 7. The method of claim 6 wherein the difference between the
12 foreground color and the background color is deemed to be
13 negligible when the difference in saturation between foreground
14 and background is less than 5%, and the difference in brightness
15 between foreground and background is less than 4%.
16

17 8. The method of claim 6 wherein the difference between the
18 foreground color and the background color is deemed to be
19 negligible when the difference in saturation between foreground
20 and background is less than 3%, and the difference in brightness
21 between foreground and background is less than 2%.
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23 9. The method of claim 1 wherein neither the foreground
24 color nor the background color is a gray-scale color, and the
25 locating step comprises comparing hue, saturation, and brightness
26 of the foreground and background colors.
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1 10. The method of claim 9 wherein the difference between the
2 foreground color and the background color is deemed to be
3 negligible when the difference in hue between foreground and
4 background is less than 6 degrees, and the combined difference
5 between the saturation and brightness values of the foreground
6 and background is less than 14%.
7

8 11. The method of claim 9 wherein the difference between the
9 foreground color and the background color is deemed to be
10 negligible when the difference in hue between foreground and
11 background is less than 4 degrees, and the combined difference in
12 saturation and brightness values of the foreground and background
13 is less than 12%.
14

15 12. The method of claim 1 wherein the electronic message
16 comprises e-mail, and the locating step comprises using a HTML
17 parser.
18

19 13. The method of claim 1 wherein the locating step
20 comprises using a color comparison module.
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22 14. The method of claim 1 wherein the spam filter is
23 responsive to characters within the electronic message.
24

25 15. The method of claim 1 wherein the electronic message is
26 a message from the group of messages comprising e-mail, instant
27 messages, chat room messages, newsgroup messages, wireless
28 messages, Morse code messages, SMS messages, MMS messages, EMS
messages, text pager messages, and graphics pager messages.

1 16. A computer-readable medium containing computer program
2 instructions for countering spam that disguises characters within
3 an electronic message, said computer program instructions
4 performing the steps of:

5 locating portions of the electronic message where the
6 difference between foreground color and background
7 color is negligible;
8 deleting from the electronic message foreground
9 characters from said portions, to form a redacted
10 electronic message; and
11 forwarding the redacted electronic message to a spam
12 filter.
13

14 17. The computer-readable medium of claim 16 wherein the
15 locating step comprises comparing hue, saturation, and brightness
16 of the foreground and background colors.
17

18 18. Apparatus for countering spam in an electronic message,
19 said apparatus comprising:

20 means for locating portions of the electronic message
21 where the difference between foreground color and
22 background color is negligible;
23 coupled to the locating means, means for deleting from
24 the electronic message foreground characters from
25 said portions; and
26 coupled to the deleting means, a spam filter.
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1 19. The apparatus of claim 18 wherein the locating means
2 comprises a color comparison module.

3 20. The apparatus of claim 18 wherein the deleting means
4 comprises a parser.
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